DATA ITEM DESCRIPTION

Form Approved OMB No. 0704-0188

2. TITLE

1. IDENTIFICATION NUMBER

Reliability Test Plan

DI-RELI-80250

3. DESCRIPTION/PURPOSE

3.1 This plan describes the overall reliability test planning and its relationship to the total integrated test requirements. It delineates required reliability tests, their purpose and schedule. This document will be used by the procuring activity for review, approval, and subsequent surveillance and evaluation of the contractor's reliability test program.

4. APPROVAL DATE 861017

5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)

6a. DTIC APPLICABLE | 6b. GIDEP APPLICABLE

7. APPLICATION/INTERRELATIONSHIP

- 7.1 This DID contains the format and content preparation instructions for the Reliability Test Plan required by Tasks 101, 103, 202, 301, 302 and 401 (para 401.2) of MIL-STD-781D.
- 7.2 This DID is applicable to contracts which require reliability development/growth, qualification or production acceptance tests.
- 7.3 This DID is related to DI-RELI-80251 , Reliability Test Procedures; DI-RELI-80252 , Reliability Test Report; and DI-RELI-80249, Environmental Stress Screening Report. 7.4 This DID supersedes DI-R-7033.

8. APPROVAL LIMITATION

9a. APPLICABLE FORMS

9b. AMSC NUMBER

N3982

10. PREPARATION INSTRUCTIONS

- 10.1 Reference documents. The applicable issue of the documents cited herein, including their approval dates, and dates of any applicable amendments and revisions, shall be as reflected in the contract.
- 10.2 General.
- The Reliability Test Plan shall identify and describe planned contractor activities for implementation of reliability test and ESS requirements of the contract in relationship to MIL-STD-781.
- b. The Plan shall be a detailed refinement and expansion of the demonstration section of the Reliability Program Plan when applicable.
- 10.3 Content requirements. The plan may be prepared in the contractor's format and shall contain a complete listing of all tests to be conducted for the primary purpose of obtaining data for use in reliability analysis and evaluation of the contract item or any constituent elements thereof. The plan shall be prepared in accordance with the requirements of paragraph 4.1, 4.2 and Task 101 of MIL-STD-781. The test plan shall include the following:
 - a. Test objectives and requirements of each reliability test.
 - b. Test item configuration description and quantity to be tested.
 - Test conditions, environmental, operational and performance profiles, and the <u>duty cycle.</u>

11. DISTRIBUTION STATEMENT

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

10. PREPARATION INSTRUCTIONS (Cont'd)

- d. Reliability growth planning curve.
- e. Test schedules and milestones, including the test program review schedule.
- f. Specific statistical test plan.
- g. Test conduct ground rules, failure criteria, and interface boundaries.
- h. Test facility and equipment descriptions and requirements, including provisions for monitoring input voltage, temperature, and vibration.
- i. Government Furnished Property requirements and impact.
- j. Limited life items.
- k. List of test reports to be issued.
- 1. Failure recurrence control system to be used to ensure corrective action.
- m. List of test procedures required.
- n. Definition of items termed replaceable at failure.
- o. Detailed reason for each proposed deviation.
- p. Degree of contractor and procuring activity participation as approved by the procuring activity.
- q. Assignment of specific responsibilities.
- r. Access control to test area and equipment under test.
- s. Specific contractor/procuring activity organizational element with respective authorities and responsibilities for implementation of reliability testing as mutually agreed to and approved by the procuring activity.
- t. Allocated funds or man-months.
- u. Organizational lines of communication.
- v. Planned man-loading for the test and associated activities.
- w. ESS implementation plan.